# **Department of Computing**

**CS 212: Object Oriented Programming** 

**Class: BSCS-6ABC** 

**Lab 10: GUI (Basic Game Programming)** 

Date: May 09, 2017

**Instructor:** 

Dr. Mian M. Hamayun / Dr. Anis ur Rahman

### **Learning Objectives**

The learning objective of this lab is to understand and practice the concept of Graphical User Interfaces and making a basic game in Java.

#### Lab Task

Write a computer program for a classic game Hangman where the computer picks a single word and accurately represents it as the human tries to guess all the letters in the word.

In case you are not familiar with the game Hangman, the general rules are as follows:

- 1. One player (the computer in this case) chooses a secret word, then writes out a number of dashes equal to the word length.
- 2. The other player begins guessing letters. Whenever she guesses a letter contained in the hidden word, the first player reveals each instance of that letter in the word. Otherwise, the guess is wrong.
- 3. The game ends either when all the letters in the word have been revealed or when the guesser has run out of guesses.

## The Assignment

Your tasks are:

- To program the basic logic for the gameplay
- To design and implement its GUI

#### Hand in

Hand in the source code from this lab at the appropriate location on the LMS system. You should hand in a single compressed/archived file named Lab\_10\_<Your CMS\_ID. Your\_NAME >.zip (without angle brackets) that contains ONLY the following files.

- 1) All completed java source files representing the work accomplished for this lab. The files should contain author in the comments at the top.
- 2) A plain text file named **README.TXT** that includes a) author information at the beginning, b) a brief explanation of the lab, and c) any comments, or suggestions.

### **To Receive Credit**

- 1. By showing up on time for lab, working on the lab solution, and staying to the end of the class period, only then you can receive full credit for the lab assignment.
- 2. Comment your program heavily. Intelligent comments and a clean, readable formatting of your code account for 20% of your grade.
- 3. The lab time is not intended as free time for working on your programming/other assignments. Only if you have completely solved the lab assignment, including all challenges, and have had your work checked off for completeness by your TA/Lab Engineer should you begin the programming/other assignments.